(12) UK Patent Application (19) GB (11) 2 274 452 (13) A

(43) Date of A Publication 27.07.1994

(21) Application No 9400525.3

(22) Date of Filing 13.01.1994

(30) Priority Data
(31) 9301117 (32) 21.01.1993 (33) GB

(51) INT CL[5]
B65D 85/57

(52) UK CL (Edition M)
B8P PE2C
U1S S2119

(56) Documents Cited
None

(58) Field of Search
UK CL (Edition M) B8P PB3 PB4 PCX PE2A PE2B PE2C PE2G PE2X PJ PKX
INT CL[5] B65D , G11B 23/03
Online database:W.P.I.

(71) Applicant(s)
White Knight Products Limited

(Incorporated in the United Kingdom)

4 Hawthorne Road, EASTBOURNE, East Sussex, BN21 6QA, United Kingdom

(72) Inventor(s)
Norman Eric Brinkhurst

(74) Agent and/or Address for Service
Dibb Lupton Broomhead
Fountain Precinct, Balm Green, SHEFFIELD, S1 1RZ, United Kingdom

(54) Compact disc package

(57) A package for a compact disc comprises a rectangular sheet or blank divided into at least two segments 11, 12 comprising respectively the front 11 and the back 12 of the package, the segments 11, 12 being separated by a strip 8 bounded by longitudinal fold lines, and (i) a compact disc holder 13 having an edge region connected to the strip 8 such that the two segments 11, 12 of the rectangular sheet can overlie respectively the front and back surfaces of the compact disc holder 13. The holder 13 may have clips 23, 24 engaging the strip 8 or flexible adhesive hinges may connect the holder 13 to the adjacent regions of the segments 11, 12.

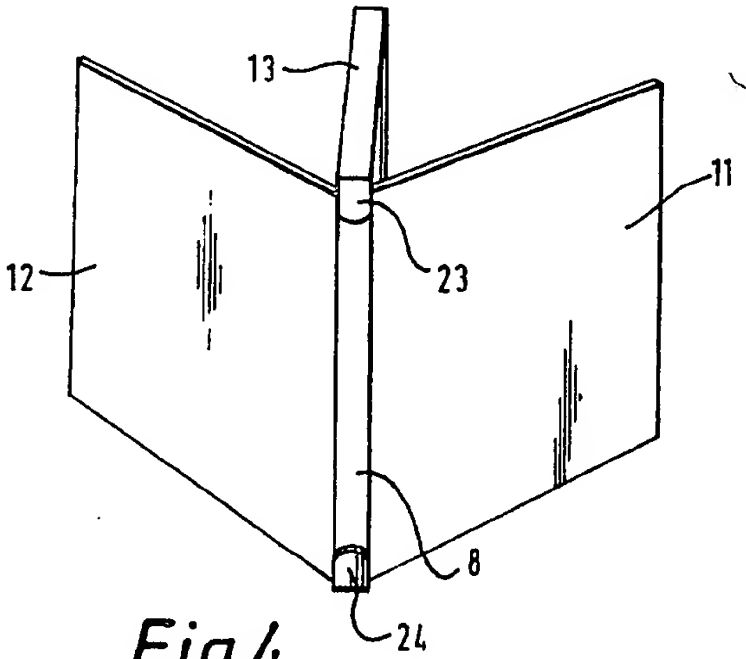

Fig.4.

GB 2 274 452 A

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

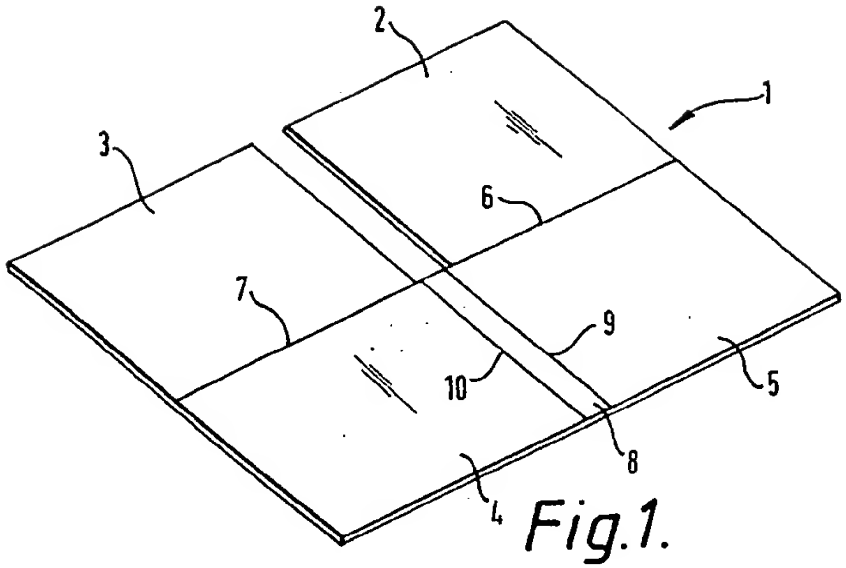

Fig.1.

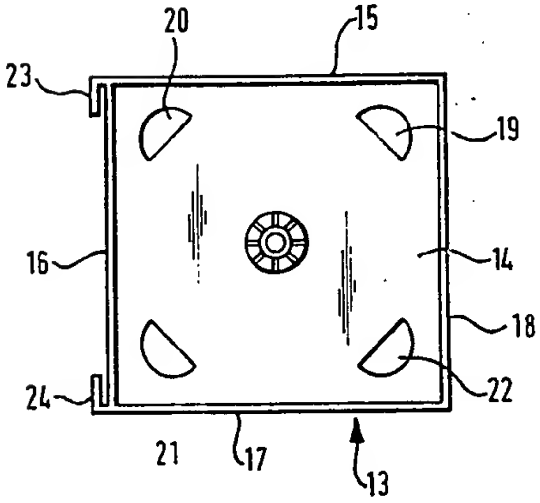

Fig.2.

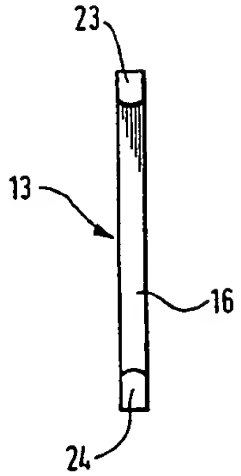

Fig.3.

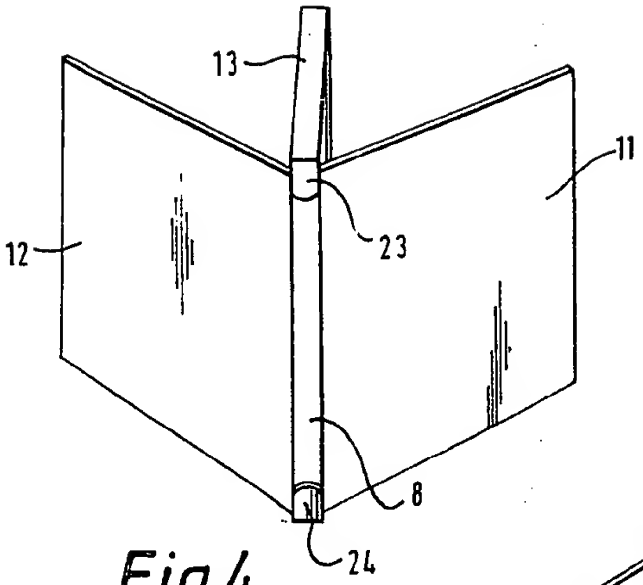

Fig.4.

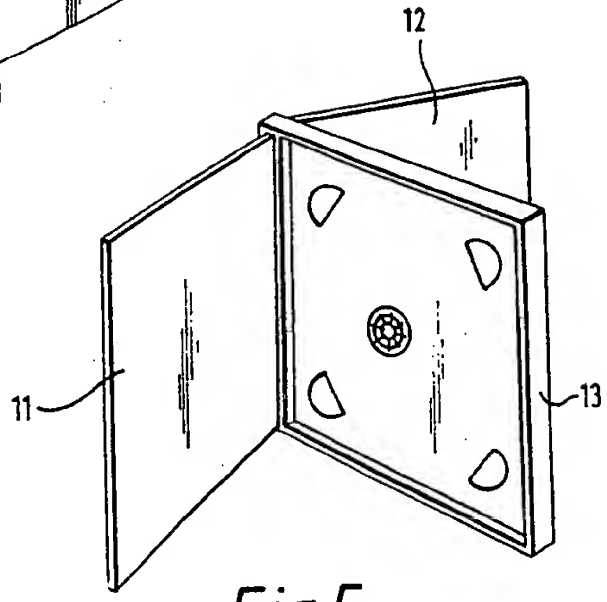

Fig.5.

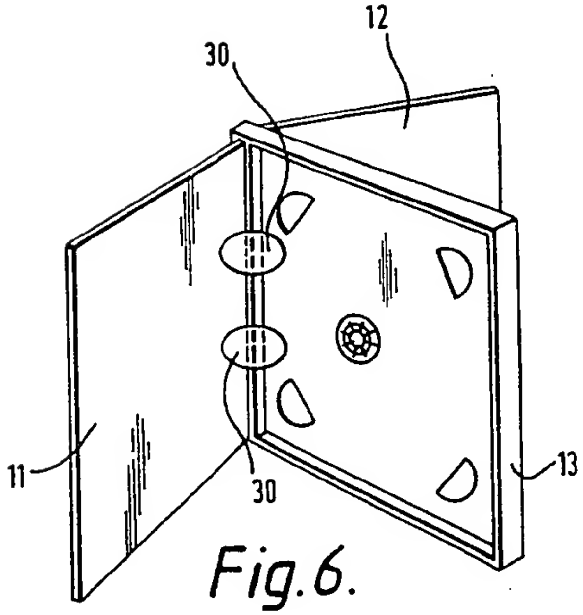

Fig.6.

COMPACT DISC PACKAGE

Technical Field

This invention relates to compact disc packages, and more particularly to a compact disc package having improved robustness and versatility.

Background Art

Compact discs or "CDs", comprising a 12cm diameter metallised disc carrying laser-readable information have rapidly replaced vinyl records in the field of recorded music. The advent of the compact disc has necessitated a new approach to the packaging of such items.

The most popular form of CD package is the so-called "jewel box" which generally comprises three separate plastic mouldings, namely clear front and back panels of generally rectangular shape, having sides which co-operate together to form a box, and an opaque compact disc holder, also of generally rectangular shape, which commonly is a snap-fit into the back panel. The front and back panels of the jewel box are normally hingedly connected together along one edge so as to open like a book. Such a package is described, for example, in US Patent No. 4535888, the disclosure of which is incorporated herein by reference. Multiple CD packages are also kn wn, in which a mid-section is provided

between the front and back panels which comprises one or more further CD holders. The side walls of the mid-section form parts of the sides of the package, and the front and back panels are hingedly connected to the mid-section. Such a package is described, for example, in European Patent Application No. 0420350, the disclosure of which is incorporated herein by reference.

Although the jewel box presents an attractive appearance, it is expensive to manufacture, and because of the brittle nature of the plastics materials used in its construction, is highly susceptible to breakage. A more robust design of compact disc package is disclosed in US Patent No. 4709812, which describes a package for a compact disc formed from a prescored, preprinted unitary blank or sheet and at least one injection moulded plastic compact disc holder. The disclosure of US Patent No. 4709812 is also incorporated herein by reference.

The unitary blank or sheet of US Patent No. 4709812 can be preprinted and can be prescored along fold lines so that the final package has, for example, four, five, seven or nine panels for graphics and can hold one or two CDs, as desired. After the blank or sheet has been folded into the desired shape, the rear face of a CD holder is glued or otherwise fixed to the face of an end segment of the blank or sheet and the remaining segments folded around it. The resulting construction is extremely robust, but has the disadvantage that the package must be factory assembled, so that each package

can only be used for the compact disc whose details are printed on the blank or sheet. This is in contrast to the jewel box, in which the panels are frequently supplied as separate components, so that the compact discs and their respective printed inserts can be inserted into the jewel box by the record manufacturer as and when the final package is assembled.

There is therefore a need for a compact disc package of a more robust construction whose components can be separately supplied to give the versatility associated with the existing jewel box construction.

Disclosure of Invention

According to the present invention there is provided a package for a compact disc comprising:

a rectangular sheet or blank divided into at least two segments comprising respectively the front and the back of the package,

the segments being separated by a strip forming a spine of the package and having a width that is small relative to the width of the segments,

the strip being bounded by longitudinal fold lines, and

(i) a compact disc holder having an edge region connected to the strip such that the two segments of the rectangular sheet can overlie respectively the front and back major surfaces of the compact disc holder,or

(ii) a compact disc holder having an edge region connected to the sheet or blank such that the two segments of the rectangular sheet can overlie respectively the front and back major surfaces of the compact disc holder and are hingedly openable with respect thereto.

In another aspect the invention provides a method of assembling a package for a compact disc which comprises:

folding a rectangular sheet or blank into two segments comprising respectively the front and the back of the package,

the segments being separated by a strip forming a spine of the package and having a width that is small relative to the width of the segments,

the strip being bounded by longitudinal fold lines, and

(i) connecting an edge region of a compact disc holder to the strip such that the two segments of the rectangular sheet or blank overlie respectively the front and back surfaces of the compact disc holder, or (ii) a edge region of a compact disc holder to the sheet or blank such that the two segments of the rectangular sheet or blank overlie respectively the front and back major surfaces of the compact disc holder and are hingedly openable with respect thereto.

Although in certain circumstances it may be possible to connect the edge region of the compact disc holder to the strip or to the sheet or blank by means of an

adhesive, for example by the use of a double sided adhesive tape, for ease of assembly it is preferred for the connection to be mechanical, and, for example, the edge region of the compact disc holder may be provided with resilient clips which grip the strip, or the sheet or blank; alternatively or in addition rivets or staples may be provided to connect the strip to the edge region. Preferably the longitudinal ends of an edge region of the compact disc holder are provided with resilient clips which overlie the strip at its ends.

The edge region of the compact disc holder is usually relatively rigidly connected to the strip, although in some embodiments it may be hingedly connected thereto or to the sheet or blank. The package is opened by folding back the front or back of the package along the fold lines bordering the strip.

The rectangular sheet or blank may comprise two or more sections which may be folded so as to produce the segments of the rectangular sheet. At least two of the segments form the front and back of the package, and other segments may be hingedly connected to these two. In a preferred embodiment, the sheet comprises four sections which are printed on one or both sides and then folded so that the resultant two segments each have printed matter and information on both inside and outside segments. The sheet or blank may be formed from stiff paper or cardboard, or from a foldable non-woven fabric or plastic film, sheet or laminate.

The compact disc holder is usually generally flat, and of a square or rectangular configuration, although other configurations for example circular are also possible. It has edge regions which in most cases are of small width relative to its major surfaces.

The compact disc holder may have means for mounting a compact disc on a major surface thereof, for example it may have a raised seat and peg arrangement on one face thereof for receiving and holding a single compact disc. The edge regions may be slightly raised to provide edge protection for the compact disc.

By arranging that the connection of the compact disc holder to the strip or to the sheet or blank is located at an edge region of the compact disc holder, both sides of the compact disc holder are accessible, and thus the compact disc holder may be provided with means for mounting more than one compact disc, for example, it can be provided with a raised seat and peg arrangement, centrally disposed on both major surfaces, so that the package can contain two compact discs each mounted on one side of the compact disc holder. Two or more such compact disc holders may be provided arranged side-by-side and hingedly connected together, or separately connected to the strip, so that they can be opened like a book. The compact disc holder is preferably formed from a plastics material, and may be injection moulded or produced by any other suitable plastics forming process.

Brief Description of Drawings

Certain embodiments of the invention will now be described by way of example with reference to the accompanying Drawings in which:

Figure 1 shows a perspective view of an unfolded sheet or blank suitable for use in an embodiment of a compact disc package according to the invention;

Figure 2 shows a plan view of a compact disc holder suitable for use with the blank of Figure 1;

Figure 3 shows an end elevation of the compact disc holder of Figure 2;

Figure 4 shows a perspective view from one side of the assembled compact disc package in the open condition;

Figure 5 shows a perspective view from the opposite side of the compact disc package in the open condition; and

Figure 6 shows a perspective view of a further embodiment of a compact disc package according to the invention in the open condition.

Referring to Figure 1, there is shown a sheet or blank illustrated generally at 1, which comprises four sections 2,3,4,5, sections 2 and 5 being separated by a fold line 6 and sections 3 and 4 being separated by a fold line 7. Between sections 4 and 5 is situated a

narrow strip 8, which will ultimately form the spine of the package, and which is bounded by fold lines 9 and 10. Segments 11 and 12, forming respectively the front and the back of the compact disc package are produced by folding over sections 2 and 3 of the sheet or blank and optionally gluing them to the faces of sections 5 and 4 respectively.

Referring now to Figure 2, the compact disc holder illustrated generally at 13, comprises a tray 14 bounded by raised sides 15, 16, 17 and 18. The tray 14 has cut-out portions 19, 20, 21 and 22 at its corners, and a raised seat and peg arrangement centrally disposed thereon for receiving and retaining a compact disc. A similar raised seat and peg arrangement is centrally disposed on the reverse side of the tray 14 (not shown). The cut-out portions 19, 20, 21 and 22 are optional, but when present enable compact discs held in the compact disc holder to be readily removed between thumb and finger. A releasable clip arrangement (not shown) may be provided, for example on side 18, to retain the front and back segments 11 and 12 of the package in their closed positions abutting the holder 13.

The compact disc holder 13 is connected to the sheet or blank 1 by means of resilient clips 23 and 24, which are integrally-moulded together with the compact disc holder, and extend inwardly from the top and bottom of the end wall 16 of the compact disc holder 13.

The compact disc package is readily assembled, either by sliding the sheet or blank 1 between the resilient clips 23 and 24 until the strip 8 is located between them, or by pivotally flexing the resilient clips 23 and 24, or by bending or flexing the sheet or blank 1, so that the sheet or blank 1 can be located in position with the clips 23 and 24 overlying the end regions of the strip 8.

The assembled compact disc package is shown in Figures 4 and 5. It can readily be seen that the compact disc package can be opened like a book and that both sides of the compact disc holder 13 can be readily accessed in order to remove or replace a compact disc mounted thereon. This is in contrast to the arrangement of US Patent No. 4709812 in which the back face of the compact disc holder is glued to a segment of the sheet or blank and is thus not available for mounting a compact disc.

Referring to Figure 6, this shows a further embodiment in which the segments 11, 12 forming the front and back of the package, are connected to edge regions of the compact disc holder 13 by four flexible adhesive hinges 30 of generally elliptical shape (only two of the hinges are shown). The hinges can be made from flexible plastics sheet or cloth coated with a suitable adhesive.

The reader's attention is directed to all papers and documents which are filed concurrently with this specification and which are open to public inspection

with this specification, and the contents of all such papers and documents are incorporated herein by reference.

All the features disclosed in this specification (including any accompanying claims, abstract and drawings), and/or all of the steps or any method or process so disclosed, may be combined in any combination, except combinations where at least some of such features and/or steps are mutually exclusive.

Each feature disclosed in this specification (including any accompanying claims, abstract and drawings), may be replaced by alternative features serving the same, equivalent or similar purpose, unless expressly stated otherwise. Thus, unless expressly stated otherwise, each feature disclosed is one example only of a generic series of equivalent or similar features.

CLAIMS

1. A package for a compact disc comprising :

a rectangular sheet or blank divided into at least two segments comprising respectively the front and the back of the package,

the segments being separated by a strip forming a spine of the package and having a width that is small relative to the width of the segments,

the strip being bounded by longitudinal fold lines, and

(i) a compact disc holder having an edge region connected to the strip such that the two segments of the rectangular sheet can overlie respectively the front and back surfaces of the compact disc holder, or

(ii) a compact disc holder having an edge region connected to the sheet or blank such that the two segments of the rectangular sheet can overlie respectively the front and back major surfaces of the compact disc holder and are hingedly openable with respect thereto.

2. A compact disc package according to Claim 1, in which the edge region of the compact disc holder is mechanically connected to the strip of the rectangular sheet or blank forming the spine of the package.

3. A compact disc package according to Claim 1 or 2, in which the edge region of the compact disc holder is provided with resilient clips which overlie end regions of the strip forming the spine of the package.

4. A compact disc package according to any of the preceding Claims, in which the rectangular sheet or blank comprises two or more sections which are folded so as to produce the segments of the rectangular sheet.

5. A compact disc package according to any of the preceding Claims in which the compact disc holder comprises means for mounting a compact disc on each of its major surfaces.

6. A compact disc package substantially as hereinbefore described with reference to and as illustrated in the accompanying Drawings.

7. A method of assembling a package for a compact disc which comprises:

folding a rectangular sheet or blank into at least two segments comprising respectively the front and the back of the package, the segments being separated by a strip forming a spine of the package and having a width that is small relative to the width of the segments,

the strip being bounded by longitudinal fold lines, and

(i) connecting an edge region of a compact disc holder to the strip such that the two segments of the rectangular sheet or blank overlie respectively the front and back surfaces of the compact disc holder, or

(ii) connecting an edge region of a compact disc holder to the sheet or blank such that the two segments of the rectangular sheet or blank overlie respectively the front and back major surfaces of the compact disc holder and are hingedly openable with respect thereto.

8. A method according to Claim 7, for the production of a compact disc package according to any of Claims 1 to 6.

9. A compact disc package produced by a method according to Claim 7 or 8.

10. A compact disc package substantially as hereinbefore described.